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(FILE 'HOME' ENTERED AT 11:12:36 ON 16 SEP 2008)

FILE 'REGISTRY' ENTERED AT 11:12:48 ON 16 SEP 2008

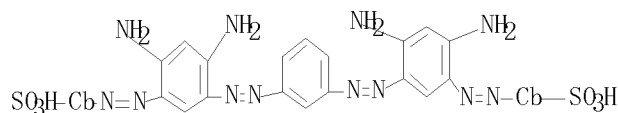
L1 STRUCTURE UPLOADED

L2 1 S L1

L3 15 S L1 FULL

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L1 STR



Structure attributes must be viewed using STN Express query preparation.

L3 15 SEA FILE=REGISTRY SSS FUL L1

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15 ANSWERS

SEARCH TIME: 00.00.01

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FILE 'CAPLUS' ENTERED AT 11:14:16 ON 16 SEP 2008

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FILE COVERS 1907 - 16 Sep 2008 VOL 149 ISS 12

FILE LAST UPDATED: 15 Sep 2008 (20080915/ED)

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<http://www.cas.org/legal/infopolicy.html>

'FIONA' IS DEFAULT FORMAT FOR 'CAPLUS' FILE

=> s l3

L4 20 L3

=> d 1-20 bib abs hitstr

L4 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:565368 CAPLUS

DN 147:11370

TI Liquid direct dye formulations for dyeing cellulose materials, especially, paper

IN Klopp, Ingo; Etzbach, Karl-Heinz; Reichelt, Helmut

PA BASF Aktiengesellschaft, Germany

S0 PCT Int. Appl., 16pp.

CODEN: PIXXD2

DT Patent

LA German

FAN, CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007057370	A2	20070524	WO 2006-EP68376	20061113
	WO 2007057370	A3	20070809		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
	CA 2628706	A1	20070524	CA 2006-2628706	20061113
	EP 1951820	A2	20080806	EP 2006-819418	20061113
	R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR			
PRAI	EP 2005-25196	A	20051118		
	WO 2006-EP68376	W	20061113		

AB The invention relates to aqueous liquid formulations containing 5-30% of a dye composition that comprises 25-85% of Direct brown 44, 15-75% of Direct yellow 11 and/or a dye obtained by reducing or thermally treating direct yellow 11, 0-15% of ≥ 1 Direct blue dyes, and 0-10% of ≥ 1 direct red dyes, 0.5-15% of ≥ 1 alkylamines, the one, two, or three alkyl groups of which can be substituted by one or two hydroxyl groups and/or amino groups and/or be interrupted by one or two oxygen atoms having an ether function, the Na concentration of the liquid formulation not exceeding 0.3%.

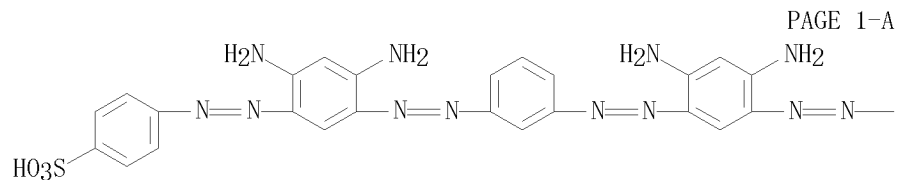
IT 6252-62-6, Direct brown 44

RL: TEM (Technical or engineered material use); USES (Uses)

(liquid direct dye formulations for dyeing cellulose materials, especially, paper)

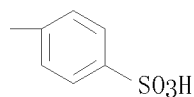
RN 6252-62-6 CAPLUS

Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)

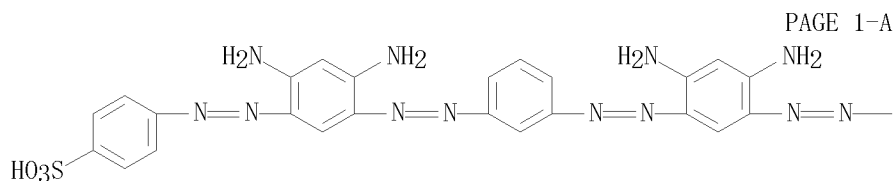


●2 Na

PAGE 1-B

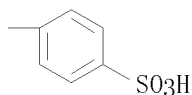


L4 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2006:826571 CAPLUS
 DN 146:290387
 TI Expression and characterization of the genes encoding azoreductases from
 Bacillus subtilis and Geobacillus stearothermophilus
 AU Sugiura, Wataru; Yoda, Tomoko; Matsuba, Takashi; Tanaka, Yoshinori;
 Suzuki, Yasuhiko
 CS Department of Environmental Health, Osaka Prefectural Institute of Public
 Health, 1-3-69 Nakamichi, Higashinari-ku, Osaka, 537-0025, Japan
 SO Bioscience, Biotechnology, and Biochemistry (2006), 70(7), 1655-1665
 CODEN: BBBIEJ; ISSN: 0916-8451
 PB Japan Society for Bioscience, Biotechnology, and Agrochemistry
 DT Journal
 LA English
 AB Azoreductases have been characterized as enzymes that can decolorize azo
 dyes by reducing azo groups. In this study, genes encoding proteins
 having homol. with the azoreductase gene of Bacillus sp. OY1-2 were
 obtained from Bacillus subtilis ATCC6633, B. subtilis ISW1214, and
 Geobacillus stearotherophilus IF013737 by polymerase chain reaction. All
 three genes encoded proteins with 174 amino acids. The deduced amino acid
 sequences of azoreductase homologs from B. subtilis ISW1214, B. subtilis
 ATCC6633, and G. stearotherophilus IF013737 showed similarity of 53.3,
 53.9, and 53.3% resp. to that of Bacillus sp. OY1-2. All three genes were
 expressed in Escherichia coli, and were characterized as having the
 decolorizing activity of azo dyes in a β -NADPH dependent manner. The
 transformation of several azo dyes into colorless compds. by recombinant
 enzymes was demonstrated to have distinct substrate specificity from that
 of azoreductase from Bacillus sp. OY1-2.
 IT 6252-62-6, Direct brown 44
 RL: BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological
 study); RACT (Reactant or reagent)
 (reaction with azoreductase; expression and characterization of genes
 encoding azoreductases from Bacillus subtilis and Geobacillus
 stearothermophilus)
 RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-
 3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

PAGE 1-B



RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2006:193711 CAPLUS
 DN 144:275706
 TI Liquid formulations of direct dyes
 IN Nordmann, Gero; Reichelt, Helmut; Klopp, Ingo; Schroder, Gunter-Rudolf
 PA BASF Aktiengesellschaft, Germany
 SO U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO

DT Patent
 LA English

FAN, CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060042028	A1	20060302	US 2005-200109	20050810
	US 7160336	B2	20070109		
	EP 1632535	A1	20060308	EP 2005-16961	20050804
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
PRAI	EP 2004-20878	A	20040902		

OS CASREACT 144:275706

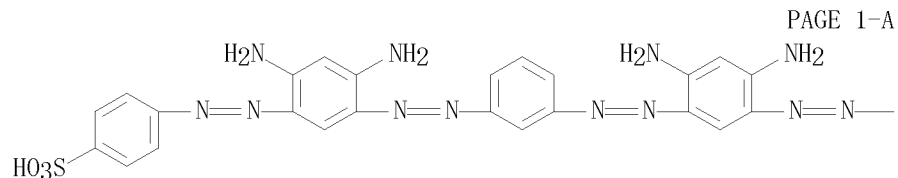
AB Title formulation comprises (A) 5-25% dye composition containing 20-100 Direct Yellow 11 or reducing or thermal treated Direct Yellow 11, 0-30 blue direct dye, 0-30 red direct dye, and 0-60 parts brown direct dye; and (B) 1-25% poly-N-vinylformamide and/or polymer synthesized from mixture ≥ 1 ethylenically unsatd. monomers (>50% of the monomers are N-vinylformamide).

IT 6252-62-6, Direct brown 44

RL: TEM (Technical or engineered material use); USES (Uses)
 (liquid formulations of direct dyes)

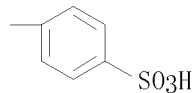
RN 6252-62-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

PAGE 1-B



RE, CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:1262726 CAPLUS

DN 144:8092

TI Method for producing a liquid formulation of salts of sulphonic-acid azo dyes

IN Schroeder, Gunter-Rudolf; Decker, Juergen; Reichelt, Helmut; Klopp, Ingo;

Diefenbacher, Armin; Voss, Hartwig
 PA BASF Aktiengesellschaft, Germany
 SO PCT Int. Appl., 24 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN, CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005113681	A1	20051201	WO 2005-EP5392	20050518
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	DE 102004025443	A1	20051208	DE 2004-102004025443	20040519
	EP 1756230	A1	20070228	EP 2005-745170	20050518
	R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR			
	CN 1957043	A	20070502	CN 2005-80016184	20050518
	MX 2006PA12950	A	20070212	MX 2006-PA12950	20061108
	US 20070232795	A1	20071004	US 2006-569263	20061117
	IN 2006CN04672	A	20070629	IN 2006-CN4672	20061219
PRAI	DE 2004-102004025443	A	20040519		
	WO 2005-EP5392	W	20050518		

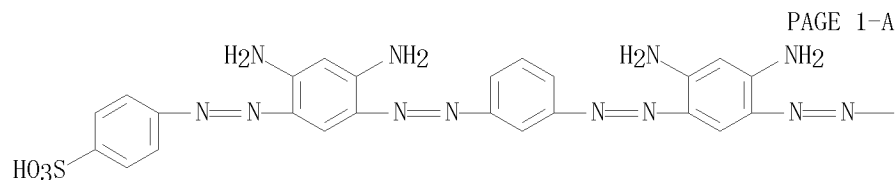
AB The invention relates to a method for producing a liquid formulation of salts of sulfonic-acid azo dyes by the coupling of at least an equimolar quantity of diazotized H₂NArSO₃H with products of the self-coupling products of phenylenediamine, which can be optionally substituted by Me. In said formula, Ar represents phenylene, which can be monosubstituted by sulfo, or naphthylene, which can be monosubstituted or disubstituted by sulfo and/or monosubstituted by hydroxy. According to the method, the azo dye is prepared as a basic solution without isolation of the dye, and then the solution is subjected to a nanofiltration to give a storage-stable solution. Thus, coupling of m-phenylenediamine (I) with diazotized I in water, adjusting the pH to 3 with NaOH, coupling of diazotized sulfanilic acid with the intermediate in suspension, adjusting the pH to 5 with NaOH, and adjusting the pH to 9.5 with aqueous NH₃, clarifying the solution by filtration (filtration residue <0.1%) gave a dye solution, and refiltering the solution through a nanofiltering membrane with the separation layer being TiO₂, pore size being 0.9 nm, and flow rate being 20.7 kg/m² h, and concentrating the filtrate by a concentration factor of 2.13 gave a C.I. Direct Brown 44 dye solution containing 97.9% solids.

IT 6252-62-6P, C.I. Direct Brown 44

RL: IMF (Industrial manufacture); PREP (Preparation)
 (producing solns. of salts of sulfonic-acid azo dyes with
 nanofiltration for purification)

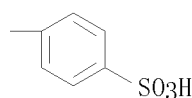
RN 6252-62-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

PAGE 1-B



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

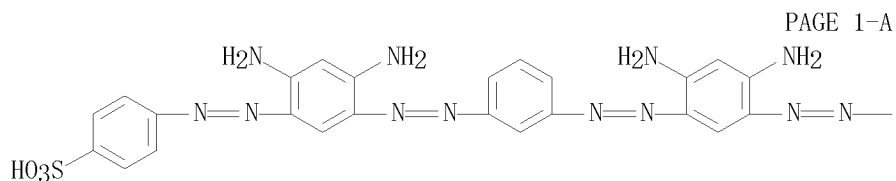
L4 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:467962 CAPLUS
DN 141:25073
TI Method for producing aqueous solutions of azo dye sulfonic acid salts
IN Schmitt, Michael; Reichelt, Helmut
PA BASF Aktiengesellschaft, Germany
SO PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2004048478	A1	20040610	WO 2003-EP12803	20031117	
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
	RW:			BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
	AU 2003288074	A1	20040618	AU 2003-288074	20031117	
	EP 1567598	A1	20050831	EP 2003-779941	20031117	
	EP 1567598	B1	20061115			
	R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK		
	CN 1717454	A	20060104	CN 2003-80104446	20031117	
	JP 2006508209	T	20060309	JP 2004-554358	20031117	
	AT 345369	T	20061215	AT 2003-779941	20031117	
	ES 2276137	T3	20070616	ES 2003-779941	20031117	
	US 20060052590	A1	20060309	US 2005-534057	20050506	
PRAI	EP 2002-26581	A	20021128			
	WO 2003-EP12803	W	20031117			
OS	MARPAT 141:25073					

AB Aqueous solution of C.I. Direct Brown 44, useful for dyeing of paper, was manufactured by (a) preparing vesuvine from m-phenylenediamine, (b) coupling the vesuvine without isolation with at least an equimolar quantity of diazotized

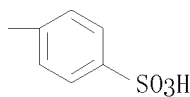
aminoaryl sulfonic acid $\text{H}_2\text{NArSO}_3\text{H}$ [Ar = (sulfo)phenylene; (OH and/or sulfo-substituted) naphthylene], and (c) isolation of the dye in acidic form and subsequent dissoln. in aqueous base. For example, the diazo component solution was prepared by dissolving 170 g sulfanilic acid in solution of 157 parts 25% aqueous NaOH in 1300 parts H_2O , adding 1300 parts ice and 335 parts of 23% aqueous NaNO_2 solution, adding 447 parts of 20% HCl and destroying the excess nitrite with sulfamic acid. The diazo component was added to the coupling component solution containing 173 parts vesuvine base in 2500 parts ice/ H_2O mixture, the pH was adjusted to 5.0-6 (aqueous NaOH), after the coupling reaction was completed the pH value was lowered to pH 1 with HCl and the resulting solid was separated by filtration and dried to give 360 g C.I. Direct Brown 44 containing 1.5% NaCl. Dissolving 20 g of the wet filter cake of the above dye and 5 parts 1,2-propanediol in 72 parts diluted aqueous NaOH (pH 10-12) and clarification gave a dye solution useful for coloration of paper.

- IT 6252-62-6P, Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[azo(4,6-diamino-3,1-phenylene)azo]]bis-, disodium salt
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (aqueous solution; method for producing aqueous solns. of azo dye sulfonic acid salts)
- RN 6252-62-6 CAPLUS
- CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)

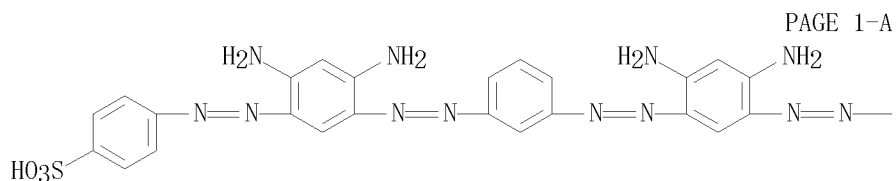


●2 Na

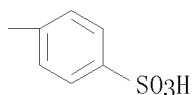
PAGE 1-B



- IT 25180-42-1P, C.I. Direct Brown 44
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (method for producing aqueous solns. of azo dye sulfonic acid salts)
- RN 25180-42-1 CAPLUS
- CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[azo(4,6-diamino-3,1-phenylene)azo]]bis- (9CI) (CA INDEX NAME)



PAGE 1-B



RE. CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:525872 CAPLUS

DN 139:92805

TI Light-sensitive lithographic printing plate precursor containing specific visible light-absorbing dye

IN Serikawa, Takeshi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 37 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003195490	A	20030709	JP 2001-399638	20011228
PRAI	JP 2001-399638		20011228		

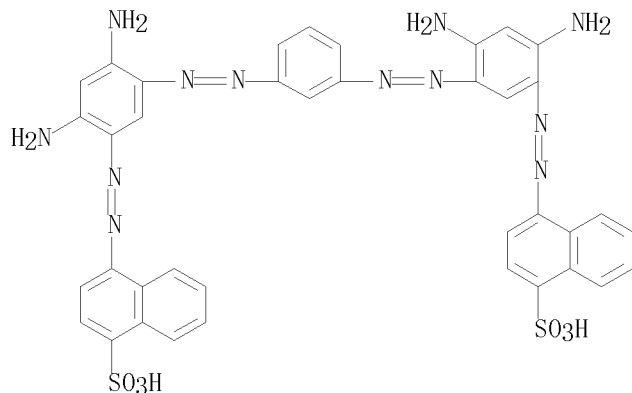
AB The title printing plate precursor has a light-sensitive layer, which contains a light-to-heat converting compound, a water-insol. alkali-solubilizable resin, and a visible light-absorbing dye having a acidic group, on a support, wherein the dye maintains the acidic group after development process. The printing plate precursor provides printing plate of high contrast between image parts and background for easy inspection of the printing plate and shows the good development characteristics.

IT 6417-95-4

RL: TEM (Technical or engineered material use); USES (Uses)
(visible light-absorbing dye)

RN 6417-95-4 CAPLUS

CN 1-Naphthalenesulfonic acid, 4,4'-[1,3-phenylenebis[azo(4,6-diamino-3,1-phenylene)azo]]bis-, disodium salt (9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:886055 CAPLUS

DN 137:371581

TI Coloring paper with mixtures of dyes

IN Franken, Paul; Roick, Thomas; Landsgesel, Udo; Mueller, Heinz; Strumpf, Klaus-Guenter; Klahr, Antje; Wild, Peter; Hundertmark, Claudia; Kunde, Klaus

PA Bayer AG, Germany

SO Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN, CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1258562	A2	20021120	EP 2002-9340	20020503
	EP 1258562	A3	20030305		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	DE 10133275	A1	20021121	DE 2001-10133275	20010709
PRAI	DE 2001-10123883	A	20010516		
	DE 2001-10133275	A	20010709		

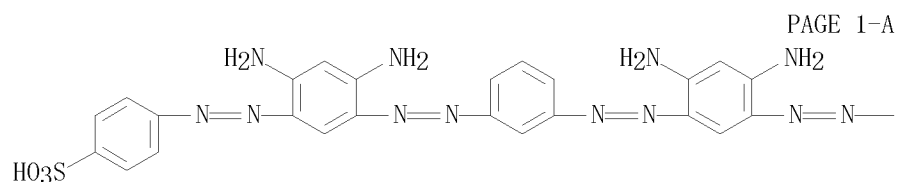
AB In the title process, which avoids the use of C.I. Basic Brown 1, mixts. of anionic dyes with absorption maximum 390-470 nm and those with absorption maximum 560-650 nm are used. Mixing pulp from 1000 kg recycled paper with 1.2 kg C.I. Direct Brown 44 and 0.4 kg C.I. Direct Blue 199 as concentrated aqueous solns. of Na salts gave a light brown paper with good resistance to bleeding and light.

IT 25180-42-1, C.I. Direct Brown 44

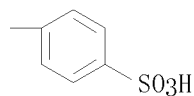
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
(coloring paper with mixts. of dyes)

RN 25180-42-1 CAPLUS

CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[azo(4,6-diamino-3,1-phenylene)azo]]bis- (9CI) (CA INDEX NAME)



PAGE 1-B



L4 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:204287 CAPLUS

DN 137:141714

TI Influence of light exposure on the UV protection of direct, reactive, acid, and disperse dyes on cotton and nylon fabrics

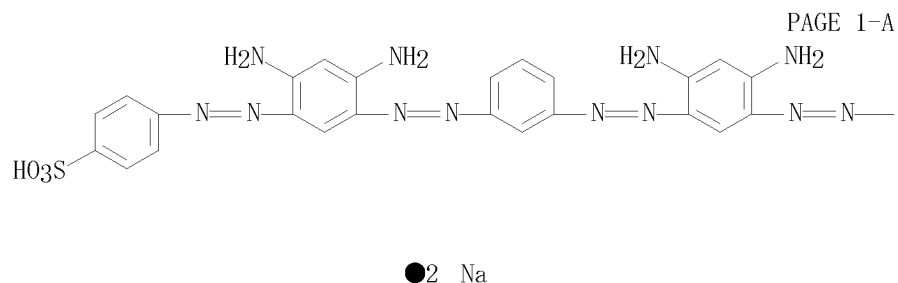
AU Veatch, Kelly D.; Gatewood, Barbara M.

CS Kansas State University, Manhattan, KS, USA

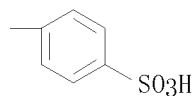
SO AATCC Review (2002), 2(2), 47-51

CODEN: ARAEBW; ISSN: 1532-8813

PB American Association of Textile Chemists and Colorists
 DT Journal
 LA English
 AB The UV protection provided by fabrics can be enhanced appreciably by use of certain dyes that absorb in the UV region. This study examined the relationships among dye fading, UV transmission, and UPF values for 82 dyes on nylon and cotton. The results of this study will assist in selecting dyes that have the greatest potential for increasing UV protection and least susceptible to change during light exposure.
 IT 6252-62-6, C.I. Direct Brown 44
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (brown dye; effect of light exposure on UV protection of direct dyes on fabrics)
 RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



PAGE 1-B



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 1997:616919 CAPLUS
 DN 127:312936
 OREF 127:61102a
 TI High-extinction polarizers comprising liquid crystal polymers
 IN Mortazavi, Mohammad; Yoon, Hyun Nam; Teng, Chia-chi
 PA Hoechst Celanese Corp., USA
 SO U.S., 8 pp.
 CODEN: USXXAM

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5667719	A	19970916	US 1995-459581	19950602
	JP 11506547	T	19990608	JP 1996-536525	19960520
PRAI	US 1995-459581	A	19950602		
	WO 1996-US7274	W	19960520		

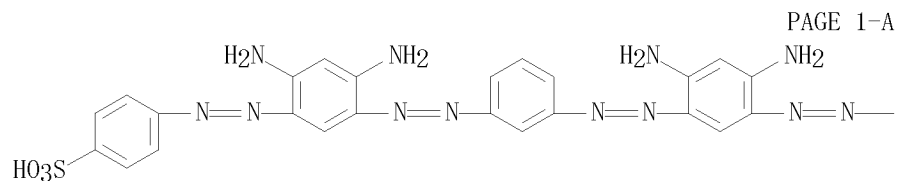
AB This invention provides high-extinction organic polarizers based on blends of novel liquid crystalline polymers and suitable dichroic dyes. The invention further provides a process to prepare such polarizers.

IT 6252-62-6, Direct Brown 44

RL: TEM (Technical or engineered material use); USES (Uses)
(high-extinction polarizers containing liquid crystal polymers and)

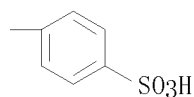
RN 6252-62-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

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L4 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1987:441689 CAPLUS

DN 107:41689

OREF 107:6973a, 6976a

TI Concentrated aqueous dye solution compositions

IN Taniguchi, Koichi; Inoue, Kaname

PA Japan Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

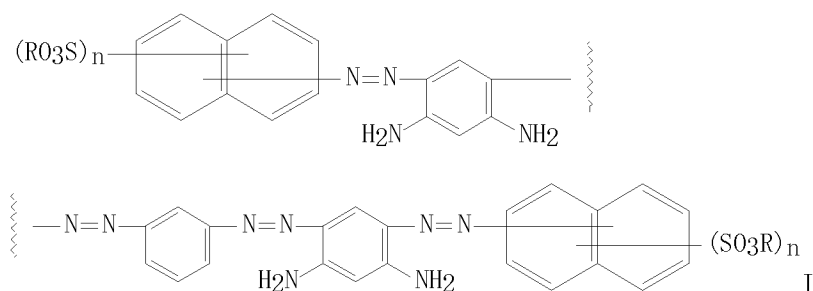
CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61296069	A	19861226	JP 1985-136871	19850625
	JP 07000748	B	19950111		
PRAI	JP 1985-136871		19850625		
GI					



AB The title compns. comprise brown dyes I [R = Li, NH₂(CH₂CH₂OH)₂, NH₂(CH₂CH₂OH)₃; n = 1, 2] and water soluble polyalkylene glycols, and are

useful in manufacture of paper and leather. Thus, Na naphthionate was diazotized, the diazonium salt treated with C.I. Basic Brown 1, H₂O, polyethylene glycol, and urea at 10°, the pH adjusted to 8 by (HOCH₂CH₂)₃N, and then H₂O was added at 30°. This solution (A) was storage-stable for 6 mo. A pulp solution was mixed with A, a size, and anhydrous Al₂(SO₄)₃, and was used to prepare uniformly brown paper.

IT 109059-74-7P 109081-98-3P

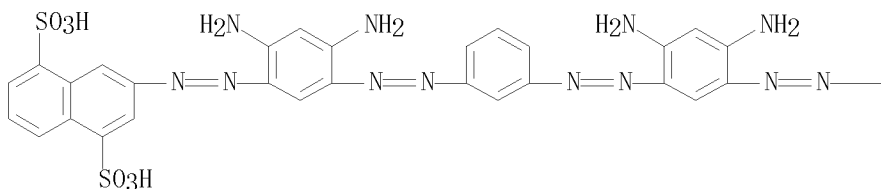
RL: PREP (Preparation)

(brown, manufacture of, for cellulose pulp and leather, aqueous storage-stable compns. containing)

RN 109059-74-7 CAPLUS

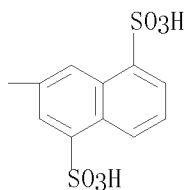
CN 1,5-Naphthalenedisulfonic acid, 3,3'-[1,3-phenylenebis[azo(4,6-diamino-3,1-phenylene)azo]]bis-, tetralithium salt (9CI) (CA INDEX NAME)

PAGE 1-A



●4 Li

PAGE 1-B



RN 109081-98-3 CAPLUS

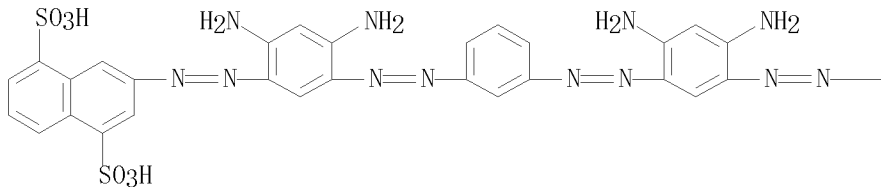
CN 1,5-Naphthalenedisulfonic acid, 3,3'-[1,3-phenylenebis[azo(4,6-diamino-3,1-phenylene)azo]]bis-, compd. with 2,2'-iminobis[ethanol] (1:4) (9CI) (CA INDEX NAME)

CM 1

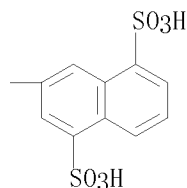
CRN 109081-97-2

CMF C38 H30 N12 O12 S4

PAGE 1-A



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CM 2

CRN 111-42-2

CMF C4 H11 N 02

HO-CH₂-CH₂-NH-CH₂-CH₂-OH

L4 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1986:573251 CAPLUS

DN 105:173251

OREF 105:27935a, 27938a

TI Scale-preventing method in vinyl polymerization

IN Koyanagi, Shunichi; Kitamura, Hajime; Shimizu, Toshihide; Kaneko, Ichiro

PA Shin-Etsu Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61051001	A	19860313	JP 1984-171045	19840817
	JP 02036602	B	19900820		
	US 4758639	A	19880719	US 1987-94020	19870903
PRAI	JP 1984-171045	A	19840817		
	JP 1984-171046	A	19840817		
	US 1985-765803	A1	19850815		

AB The title method in the suspension or emulsion polymerization of vinyl monomer(s) comprises (A) reducing surface roughness of the reactor wall to <5 μm and (B) coating the reactor and auxiliary equipment of monomer contact, with dye and/or pigment. Thus, a polymerization reactor (surface roughness 0.4-0.7 μm) coated with Solvent Black 5 exhibited no scale deposit even after 150 batches of polymerization of vinyl chloride, while a control (surface roughness 0.2-0.3 μm), without such a coating, was all covered with thick scale deposit after 10 batches.

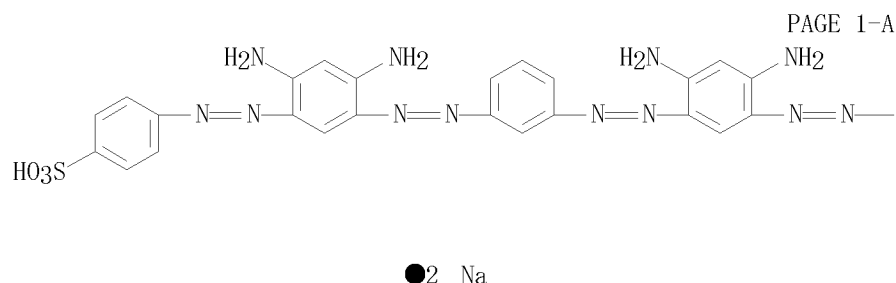
IT 6252-62-6

RL: DEV (Device component use); USES (Uses)

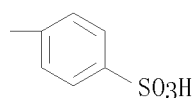
(coatings containing, on polymerization reactors, for prevention of scale during vinyl polymerization in aqueous media)

RN 6252-62-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



PAGE 1-B



L4 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1983:476924 CAPLUS

DN 99:76924

OREF 99:11813a,11816a

TI Colored shaped articles such as contact lenses

IN Suminoe, Taro; Ito, Tetsuo; Kiyomatsu, Yasuhiro; Shimizu, Takao

PA Japan Synthetic Rubber Co., Ltd. , Japan; Ricky Contact Lens Research Institute, Inc.

SO Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 82026	A2	19830622	EP 1982-306735	19821216
	EP 82026	A3	19830720		
	EP 82026	B1	19870916		
	R: DE, FR, GB				
	JP 58104286	A	19830621	JP 1981-201450	19811216
	US 4494954	A	19850122	US 1982-450040	19821215
PRAI	JP 1981-201450	A	19811216		

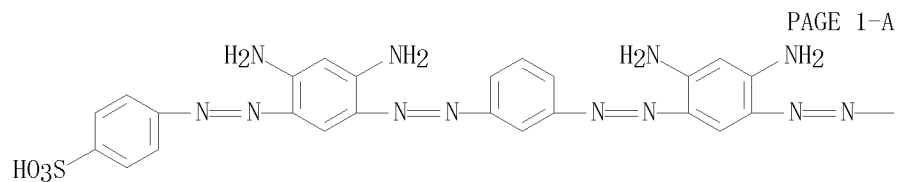
AB Uniformly colored shaped articles such as contact lenses are prepared by immersing an acrylate polymer in a dyeing solution containing a water-soluble dye in a solvent capable of swelling the polymer and drying the article. Discoloration or fading due to oozing out of the dye is prevented by uniformly penetrating or dispersing the dye into the swollen lipophilic polymers. A polymer contact lens, prepared from acrylic acid, Bu methacrylate, and ethylene glycol dimethacrylate, was immersed in PrOH and 1% MeSO₃H was added and the mixture refluxed for 24 h to complete esterification and the lens then washed with PrOH. The lens was immersed in a MeOH solution of C.I. Acid Blue 9 (C.I. 42090) [2650-18-2] for 1 h and the swollen and colored lens dried at 95° for 16 h and washed with H₂O to remove surface dye. No discoloration occurred when the lens was boiled in distilled H₂O for 7 days.

IT 6252-62-6

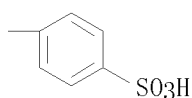
RL: BIOL (Biological study)
(acrylic contact lenses coloring with)

RN 6252-62-6 CAPLUS

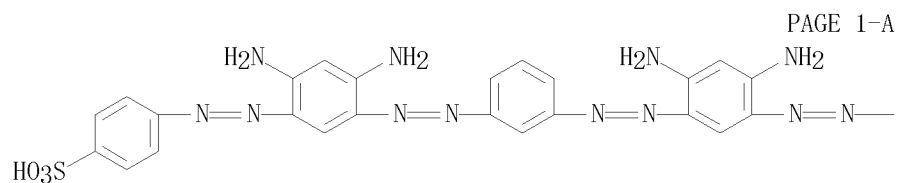
CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



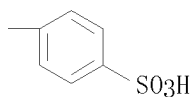
PAGE 1-B



L4 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 1982:474117 CAPLUS
 DN 97:74117
 OREF 97:12397a, 12400a
 TI Coloring agents for wood coatings and their properties
 AU Saijo, Hiroyuki
 CS Kanagawa-Ken Kagu Shido Cent., Kanagawa, Japan
 SO Kogyo Toso (1980), 44, 104-17
 CODEN: KTOSDW; ISSN: 0286-6943
 DT Journal
 LA Japanese
 AB Fifty-four colorants including direct, acid, and alc.-soluble dyes and various non-grain-raising stains were applied on wood veneer specimens and subjected to fadeometer test (JIS L 0842). The results were presented as color differences as well as changes in hue, chroma, lightness, and light reflectance.
 IT 6252-62-6
 RL: USES (Uses)
 (lightfastness of, on wood)
 RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



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L4 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1978:512364 CAPLUS

DN 89:112364

OREF 89:17366h, 17367a

TI Water-soluble polyazo dyes

IN Arsac, Aime; Frank, Pierre

PA Produits Chimiques Ugine Kuhlmann, Fr.

SO Fr. Demande, 30 pp.

CODEN: FRXXBL

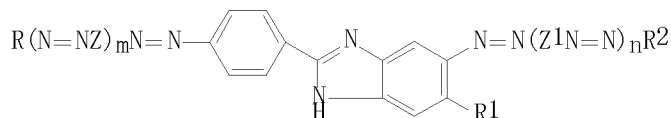
DT Patent

LA French

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2349675	A2	19771125	FR 1976-12892	19760430
	FR 2349675	B2	19790706		
PRAI	FR 1976-12892	A	19760430		

GI



I

AB Polyazo dyes [I; R, R₂ = benzene, naphthalene, heterocyclic radical; R₁ = H, Cl, alkyl; Z, Z¹ = phenylene, naphthylene; m, n = 0, 1, 2; the mol. contains (in R, R₁, Z, Z¹) 1-4 SO₃H groups and 0-2 CO₂H groups] were prepared and used to dye leather. Thus, 2-(4-aminophenyl)-5-aminobenzimidazole [7621-86-5] was tetrazotized and coupled with 2-amino-5-hydroxy-7-naphthalenesulfonic acid [87-02-5] to give I (R = R₂ = 2,5,7,1-H₂N(HO)(HO₃S)C₁₀H₄, R₁ = H, m = n = 0) [67400-98-0], fast violet on leather.

IT 67400-97-9

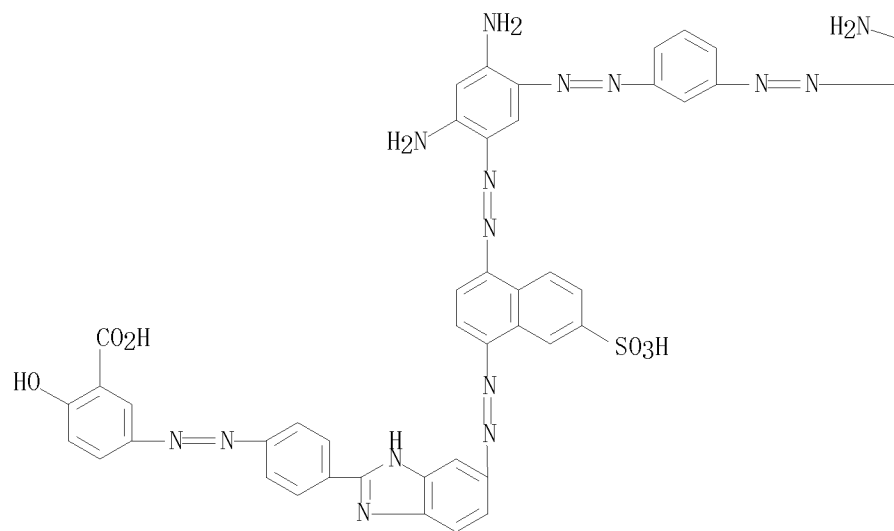
RL: USES (Uses)

(dye, for leather, preparation of)

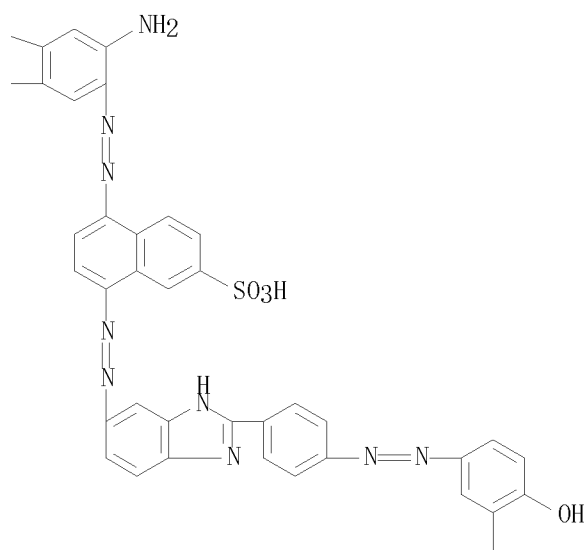
RN 67400-97-9 CAPLUS

CN Benzoic acid, 3,3'-[1,3-phenylenebis[azo(4,6-diamino-3,1-phenylene)azo(7-sulfo-4,1-naphthalenediyl)azo-1H-benzimidazole-5,2-diyl-4,1-phenyleneazo]]bis[6-hydroxy- (9CI) (CA INDEX NAME)

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PAGE 1-B



PAGE 2-B



L4 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 1974:122588 CAPLUS
 DN 80:122588
 OREF 80:19745a, 19748a
 TI Ink compositions
 IN Miyata, Fumio
 PA Sakura Color Products Corp.
 SO Ger. Offen., 46 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2317816	A1	19731018	DE 1973-2317816	19730409
	DE 2317816	B2	19770421		
	DE 2317816	C3	19771215		
	JP 48101222	A	19731220	JP 1972-36282	19720410
	JP 51039575	B	19761028		
	US 3945836	A	19760323	US 1973-348050	19730405
	GB 1430412	A	19760331	GB 1973-16552	19730406
	FR 2179953	A1	19731123	FR 1973-12954	19730410
PRAI	JP 1972-36282	A	19720410		

AB Aliphatic hydrocarbon-soluble inks, useful in marking pens, are prepared by reaction of carboxylate- or sulfonate-containing dyes with quaternary ammonium or amine salts. Thus, stirring Direct Yellow 27 [51052-88-1] 7, tributyloctylammonium chloride [51052-89-2] 8, and H₂O 130 parts 20 min at 40-50.deg. gives a precipitate, purified by extraction into 100 parts PhMe to give 13 parts dye. A mixture of this product 6, pentaerythritol rosin ester 15, and refined gasoline 79 parts gives a lemon-yellow ink.

IT 6252-62-6D, Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[azo(4,6-diamino-3,1-phenylene)azo]]bis-, disodium salt, reaction products with ammonium salts

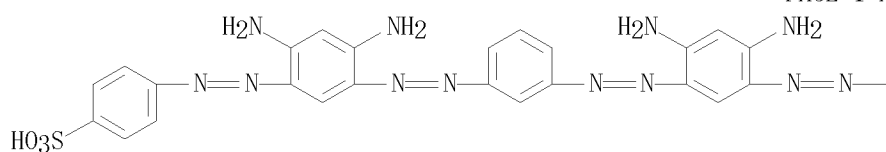
RL: USES (Uses)

(gasoline-soluble, for marking pen inks)

RN 6252-62-6 CAPLUS

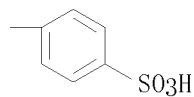
CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)

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●2 Na

PAGE 1-B



L4 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1972:424512 CAPLUS

DN 77:24512

OREF 77:4059a,4062a

TI Microbiological purification of dye-industry waste water and sewage.
Minimum toxic concentrations of dyes and mordant dyes for paramecia

AU Kobayashi, Hiroshi

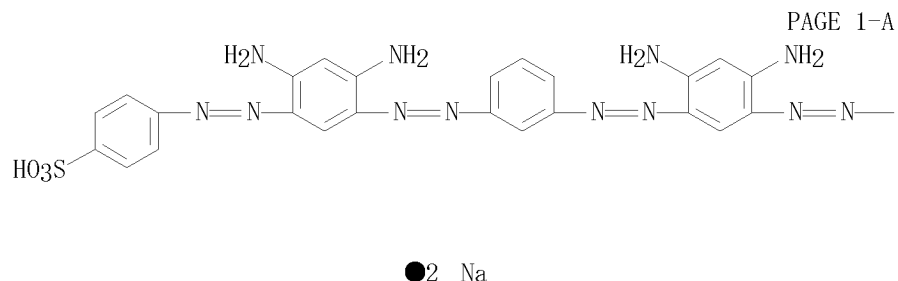
CS Suisan Coll., Minist. Agric. For., Japan

SO Mizu Shori Gijutsu (1971), 12(12), 23-30

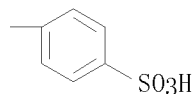
CODEN: MSYGA0; ISSN: 0026-7015

DT Journal

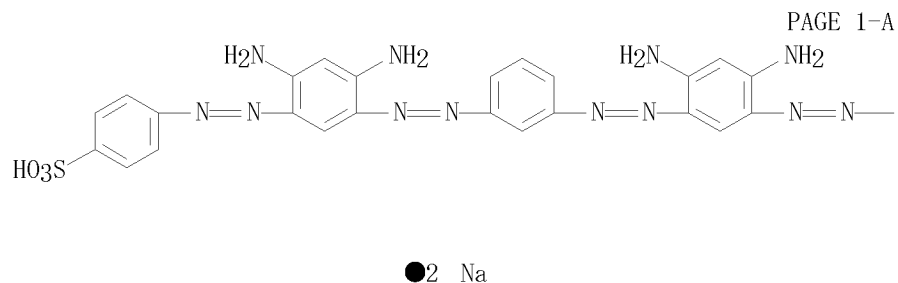
LA Japanese
 AB Survival rates of Paramecium were determined as a function of concns. of 10 dyes and 2 mordants. The toxic concns. were 8-500 ppm, depending on types of dyes and mordants used.
 IT 6252-62-6
 RL: PRP (Properties)
 (toxicity of, to Paramecium)
 RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



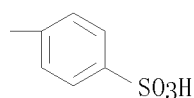
PAGE 1-B



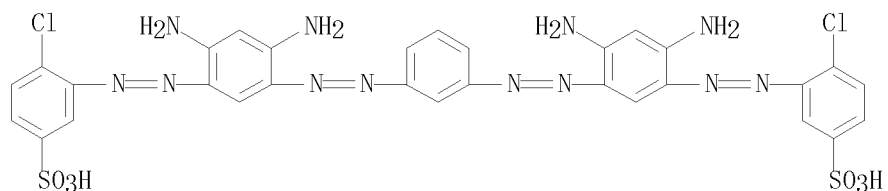
L4 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 1964:46215 CAPLUS
 DN 60:46215
 OREF 60:8182g-h, 8183a
 TI Stability of direct dyes at temperatures above 100°
 AU Zeidman, Rita; Calin, C.; Bazavan, I.; Brenman, Simona; Grindea, Misilim
 CS Polytech. Inst., Iasi, Rom.
 SO Buletinul Institutului Politehnic din Iasi (1962), 8(3-4), 445-50
 CODEN: BUPIAE; ISSN: 0032-6100
 DT Journal
 LA Unavailable
 AB The behavior of 48 direct dyes at >100° was investigated. Modifications in the spectral characteristics (CA 57, 6069h) and results of actual dyeing of cotton fibers in neutral (0.5 and 1 h.) and in alkaline (4% Na2CO3, 0.5 h.) media were determined in the presence of 10% Na2SO4-all at normal temperature and at 120°. The heat resistance of the dyes was lower in alkaline than in neutral media. In the latter, the heat resistance of the direct dyes was remarkable, only Direct Brilliant Orange and Direct Resistant Ruby L2A being unusable. The results showed that the benzidine disazo and the stilbene dyes have remarkable heat resistance, while the dyes derived from the carbonyl J acid have a lower stability. In general, stability of the dyes was the same when heated in the absence or in the presence of cotton, but in some cases the heat resistance was improved by the cotton. The role of the secondary dyes in the final behavior of the products examined was also discussed.
 IT 6252-62-6, C.I. Direct Brown 44
 (heat stability of)
 RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



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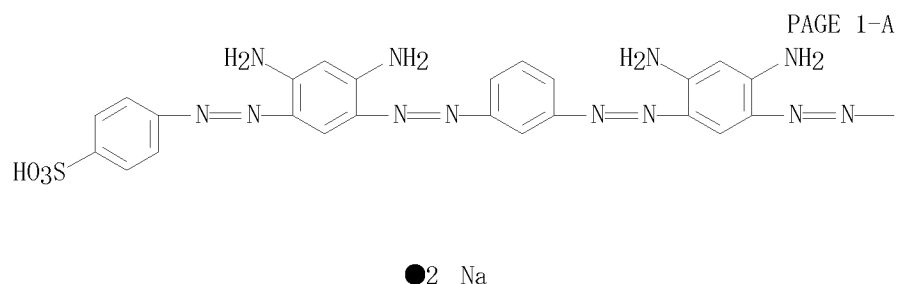


L4 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 1961:67667 CAPLUS
 DN 55:67667
 OREF 55:12857e-f
 TI Improvement of the quality of direct dyes
 AU Legradi, Laszlo; Kovacs, Tibor
 CS Veszprem County Dye Factory, Fuzfogyartelep, Hung.
 SO Magyar Kemiai Folyoirat (1961), 67, 1-3
 CODEN: MGKFA3; ISSN: 0025-0155
 DT Journal
 LA Unavailable
 AB The structure of Dianil Brown (C. I. Direct Brown 44) was altered by using 1-chloro-2-amino-4-benzenesulfonic acid (I) in the place of sulfanilic acid. I was prepared in 90% yield by sulfonating and nitrating chlorobenzene, followed by reduction Light-fastness was improved, other fastness values remained the same.
 IT 117881-07-9P, Benzenesulfonic acid, 3,3'-[m-phenylenebis[azo(4,6-diamino-m-phenylene)azo]]bis[4-chloro-
 RL: PREP (Preparation)
 (preparation of)
 RN 117881-07-9 CAPLUS
 CN Benzenesulfonic acid, 3,3'-[m-phenylenebis[azo(4,6-diamino-m-phenylene)azo]]bis[4-chloro- (6CI) (CA INDEX NAME)

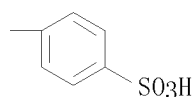


L4 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 1956:38396 CAPLUS
 DN 50:38396
 OREF 50:7463f-h
 TI Paper chromatography of reduction products of dyes from benzidine and its derivatives
 AU Kitahara, Shinya; Hiyama, Hachiro

CS Osaka City Ind. Research Inst.
 SO Kogyo Kagaku Zasshi (1955), 58, 620-5
 CODEN: KGKZA7; ISSN: 0368-5462
 DT Journal
 LA Unavailable
 AB cf. C.A. 49, 14327d. Twenty-seven kinds of benzidine dyes were subjected to acid reduction with tin chloride and examined by paper chromatog. by use of FeCl₃ or NH₄OH as coloring reagent and BuOH-HCl (4:1) mixture or 2% HCl aqueous solution as developing agent. The color and R_f values of reduction products are tabulated. The names of dyes examined are: Congo red, Benzopurpurin 4B, Direct Blue 2B, Diamine Sky Blue, Direct Violet RN, Acetopurpurine 8B, Coupling Orange Extra, Pyramine Orange R, Toluylene Orange G, Fast Red F, Benzo Orange R, Direct Brown M, Direct Red G, Benzo Fast Red G1, Congo Orange R, Benzo Brown CB, Congo Corinth G, Brilliant Bordeaux NS, Direct Black BH, Dia Mineral Blue CVB, Congo Rubin, Direct Brown 3G, Direct Green G, Direct Dark Green, Congo Brown G, Direct Fast Black HW, Deep Black Extra.
 IT 6252-62-6, Direct Brown 3G
 (chromatog. of reduction products of)
 RN 6252-62-6 CAPLUS
 CN Benzenesulfonic acid, 4,4'-[1,3-phenylenebis[2,1-diazenediyl(4,6-diamino-3,1-phenylene)-2,1-diazenediyl]]bis-, sodium salt (1:2) (CA INDEX NAME)



PAGE 1-B

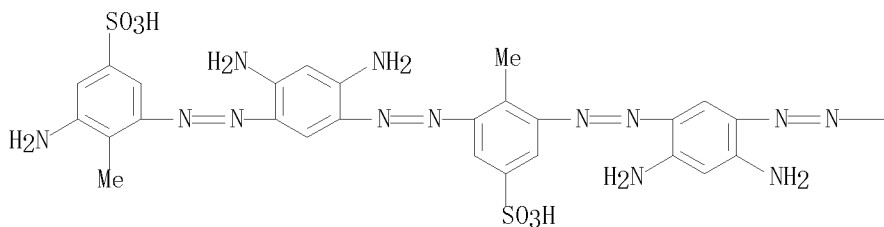


L4 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 1947:3579 CAPLUS
 DN 41:3579
 OREF 41:724e-i, 725a-d
 TI Azo compounds and their intermediates. XXVIII. The structure of toluylene brown G
 AU Ruggli, Paul; Fischer, Roland
 CS Univ. Basel
 SO Helvetica Chimica Acta (1945), 28, 445-50
 CODEN: HCACAV; ISSN: 0018-019X
 DT Journal
 LA German
 GI For diagram(s), see printed CA Issue.
 AB cf. C.A. 40, 4037.1. Toluylene brown G (I), to which has been ascribed the formula (II), is prepared in the usual manner by coupling m-C₆H₄(NH₂)₂ (IV) with tetrazotized 3,5-diamino-p-toluene-sulfonic acid (V) and found to have an atomic ratio N:S of 6:0.99, verifying the equimolar ratio demanded by the formula. However, II contains a heterocyclic 10-membered ring which is improbable from theoretical considerations. Diffusion

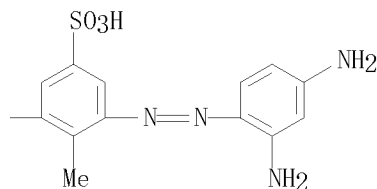
expts. indicate that I is an ion-colloid rather than a simple mol. Therefore, a chain structure (III) seems more probable than a ring configuration. Reductive splitting would not clarify the problem because either structure would yield the same products. Blocking one of the amino groups of V by acetylation to form monoacetyl-3,5-diamino-p-toluenesulfonic acid (VI), C₉H₁₂O₄N₂S.2H₂O, followed by diazotization, produces a compound which couples with IV to yield a brick-red monoazo dye (VII) which on hydrolysis with 5% NaOH for 6 hrs. gives the brown dye (VIII). VIII ("opentoluylen brown") is not a substantive dye but has the characteristics of a wool dye. VIII does become substantive when it is converted into a disazo dye by the addition of another mol. of IV to produce (IX) (Phd.N₂.Tds.N₂.Phd) [Phd = phenylenediamine residue;Tds = diaminotoluenesulfonic acid residue]. Coupling of diazotized VI with VIII produces a mono-Ac disazo dye (X) (AcTds.N₂.Phd.N₂.Tds). Diazotization of X followed by coupling with IX gives a compound which on deacetylation yields a pentakisazo dye (XI) (Tds.N₂.Phd.N₂.Tds.N₂.Phd.N₂.Tds.N₂.Phd). Thus XI is III with a definite chain length. The phys. and chemical properties of I are very much like those of XI, confirming the chainlike structure assigned to it.

IT 859493-74-6P, p-Toluenesulfonic acid, 3-[2,4-diamino-5-(3-amino-5-sulfo-o-tolylazo)phenylazo]-5-[2,4-diamino-5-[3-(2,4-diaminophenylazo)-5-sulfo-o-tolylazo]phenylazo]-
 RL: PREP (Preparation)
 (preparation of)
 RN 859493-74-6 CAPLUS
 CN Benzenesulfonic acid, 3-[2-[2,4-diamino-5-[2-(3-amino-2-methyl-5-sulphophenyl)diazenyl]phenyl]diazenyl]-5-[2-[2,4-diamino-5-[2-[3-[2-(2,4-diaminophenyl)diazenyl]-2-methyl-5-sulphophenyl]diazenyl]phenyl]diazenyl]-4-methyl- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



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 'K8' IS NOT VALID HERE

=> d que 18 stat

L5 196 SEA FILE=CAPLUS ABB=ON PLU=ON "SCHMITT MICHAEL"/AU
 L6 136 SEA FILE=CAPLUS ABB=ON PLU=ON "REICHELTL HELMUT"/AU
 L7 330 SEA FILE=CAPLUS ABB=ON PLU=ON L5 OR L6
 L8 4 SEA FILE=CAPLUS ABB=ON PLU=ON L7 AND (VESUVIN OR (BASIC
 BROWN 1) OR (BISMARCK BROWN) OR (DIRECT BROWN 44))

=> d 1-4 bib abs

L8 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2007:565368 CAPLUS
 DN 147:11370
 TI Liquid direct dye formulations for dyeing cellulose materials, especially, paper
 IN Klopp, Ingo; Etzbach, Karl-Heinz; Reichelt, Helmut
 PA BASF Aktiengesellschaft, Germany
 SO PCT Int. Appl., 16pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2007057370	A2	20070524	WO 2006-EP68376	20061113	
	WO 2007057370	A3	20070809			
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW		
	RW:			AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA		
	CA 2628706	A1	20070524	CA 2006-2628706	20061113	
	EP 1951820	A2	20080806	EP 2006-819418	20061113	
	R:			AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR		
PRAI	EP 2005-25196	A	20051118			
	WO 2006-EP68376	W	20061113			

AB The invention relates to aqueous liquid formulations containing 5-30% of a dye composition that comprises 25-85% of Direct brown 44, 15-75% of Direct yellow 11 and/or a dye obtained by reducing or thermally treating direct yellow 11, 0-15% of ≥ 1 Direct blue dyes, and 0-10% of ≥ 1 direct red dyes, 0.5-15% of ≥ 1 alkylamines, the one, two, or three alkyl groups of which can be substituted by one or two hydroxyl groups and/or amino groups and/or be interrupted by one or two oxygen atoms having an ether function, the Na concentration of the liquid formulation not exceeding 0.3%.

L8 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2006:193711 CAPLUS
 DN 144:275706
 TI Liquid formulations of direct dyes
 IN Nordmann, Gero; Reichelt, Helmut; Klopp, Ingo; Schroder, Gunter-Rudolf
 PA BASF Aktiengesellschaft, Germany
 SO U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 20060042028	A1	20060302	US 2005-200109	20050810	
	US 7160336	B2	20070109			
	EP 1632535	A1	20060308	EP 2005-16961	20050804	
	R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,		

BA, HR, IS, YU
 PRAI EP 2004-20878 A 20040902
 OS CASREACT 144:275706
 AB Title formulation comprises (A) 5-25% dye composition containing 20-100 Direct Yellow 11 or reducing or thermal treated Direct Yellow 11, 0-30 blue direct dye, 0-30 red direct dye, and 0-60 parts brown direct dye; and (B) 1-25% poly-N-vinylformamide and/or polymer synthesized from mixture ≥ 1 ethylenically unsatd. monomers (>50% of the monomers are N-vinylformamide).
 RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2005:1262726 CAPLUS
 DN 144:8092
 TI Method for producing a liquid formulation of salts of sulphonic-acid azo dyes
 IN Schroeder, Gunter-Rudolf; Decker, Juergen; Reichelt, Helmut; Klopp, Ingo; Diefenbacher, Armin; Voss, Hartwig
 PA BASF Aktiengesellschaft, Germany
 SO PCT Int. Appl., 24 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005113681	A1	20051201	WO 2005-EP5392	20050518
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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DE 102004025443	A1	20051208	DE 2004-102004025443	20040519
EP 1756230	A1	20070228	EP 2005-745170	20050518
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1957043	A	20070502	CN 2005-80016184	20050518
MX 2006PA12950	A	20070212	MX 2006-PA12950	20061108
US 20070232795	A1	20071004	US 2006-569263	20061117
IN 2006CN04672	A	20070629	IN 2006-CN4672	20061219
PRAI DE 2004-102004025443	A	20040519		
WO 2005-EP5392	W	20050518		

AB The invention relates to a method for producing a liquid formulation of salts of sulfonic-acid azo dyes by the coupling of at least an equimolar quantity of diazotized H₂NArSO₃H with products of the self-coupling products of phenylenediamine, which can be optionally substituted by Me. In said formula, Ar represents phenylene, which can be monosubstituted by sulfo, or naphthylene, which can be monosubstituted or disubstituted by sulfo and/or monosubstituted by hydroxy. According to the method, the azo dye is prepared as a basic solution without isolation of the dye, and then the solution is subjected to a nanofiltration to give a storage-stable solution. Thus, coupling of m-phenylenediamine (I) with diazotized I in water, adjusting the pH to 3 with NaOH, coupling of diazotized sulfanilic acid with the intermediate in suspension, adjusting the pH to 5 with NaOH, and adjusting the pH to 9.5 with aqueous NH₃, clarifying the solution by filtration (filtration residue <0.1%) gave a dye solution, and refiltering the solution through a nanofiltering membrane with the separation layer being TiO₂, pore size being 0.9 nm, and flow rate being 20.7 kg/m² h, and concentrating the

filtrate by a concentration factor of 2.13 gave a C.I. Direct Brown 44 dye solution containing 97.9% solids.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:467962 CAPLUS

DN 141:25073

TI Method for producing aqueous solutions of azo dye sulfonic acid salts

IN Schmitt, Michael; Reichelt, Helmut

PA BASF Aktiengesellschaft, Germany

SO PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004048478	A1	20040610	WO 2003-EP12803	20031117
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2003288074	A1	20040618	AU 2003-288074	20031117
	EP 1567598	A1	20050831	EP 2003-779941	20031117
	EP 1567598	B1	20061115		
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
	CN 1717454	A	20060104	CN 2003-80104446	20031117
	JP 2006508209	T	20060309	JP 2004-554358	20031117
	AT 345369	T	20061215	AT 2003-779941	20031117
	ES 2276137	T3	20070616	ES 2003-779941	20031117
	US 20060052590	A1	20060309	US 2005-534057	20050506
PRAI	EP 2002-26581	A	20021128		
	WO 2003-EP12803	W	20031117		

OS MARPAT 141:25073

AB Aqueous solution of C.I. Direct Brown 44, useful for dyeing of paper, was manufactured by (a) preparing vesuvine from m-phenylenediamine, (b) coupling the vesuvine without isolation with at least an equimolar quantity of diazotized aminoaryl sulfonic acid H₂NArSO₃H [Ar = (sulfo)phenylene; (OH and/or sulfo-substituted) naphthylene], and (c) isolation of the dye in acidic form and subsequent dissoln. in aqueous base. For example, the diazo component solution was prepared by dissolving 170 g sulfanilic acid in solution of 157 parts 25% aqueous NaOH in 1300 parts H₂O, adding 1300 parts ice and 335 parts of 23% aqueous NaNO₂ solution, adding 447 parts of 20% HCl and destroying the excess nitrite with sulfamic acid. The diazo component was added to the coupling component solution containing 173 parts vesuvine base in 2500 parts ice/H₂O mixture, the pH was adjusted to 5.0-6 (aqueous NaOH), after the coupling reaction was completed the pH value was lowered to pH 1 with HCl and the resulting solid was separated by filtration and dried to give 360 g C.I. Direct Brown 44 containing 1.5% NaCl. Dissolving 20 g of the wet filter cake of the above dye and 5 parts 1,2-propanediol in 72 parts diluted aqueous NaOH (pH 10-12) and clarification gave a dye solution useful for coloration of paper.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 11:12:36 ON 16 SEP 2008)

FILE 'REGISTRY' ENTERED AT 11:12:48 ON 16 SEP 2008

L1 STRUCTURE UPLOADED

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L2 1 SEA SSS SAM L1

D SCAN

L3 15 SEA SSS FUL L1

D QUE L3 STAT

FILE 'CAPLUS' ENTERED AT 11:14:16 ON 16 SEP 2008

L4 20 SEA ABB=ON PLU=ON L3

D 1-20 BIB ABS HITSTR

E SCHMITT MICHAEL/AU

L5 196 SEA ABB=ON PLU=ON "SCHMITT MICHAEL"/AU

E REICHELT HELMUT/AU

L6 136 SEA ABB=ON PLU=ON "REICHELT HELMUT"/AU

L7 330 SEA ABB=ON PLU=ON L5 OR L6

L8 4 SEA ABB=ON PLU=ON L7 AND (VESUVIN OR (BASIC BROWN 1) OR

(BISMARCK BROWN) OR (DIRECT BROWN 44))

D QUE L8 STAT

D 1-4 BIB ABS

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

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TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

151.16

330.19

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

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